agricultural situation

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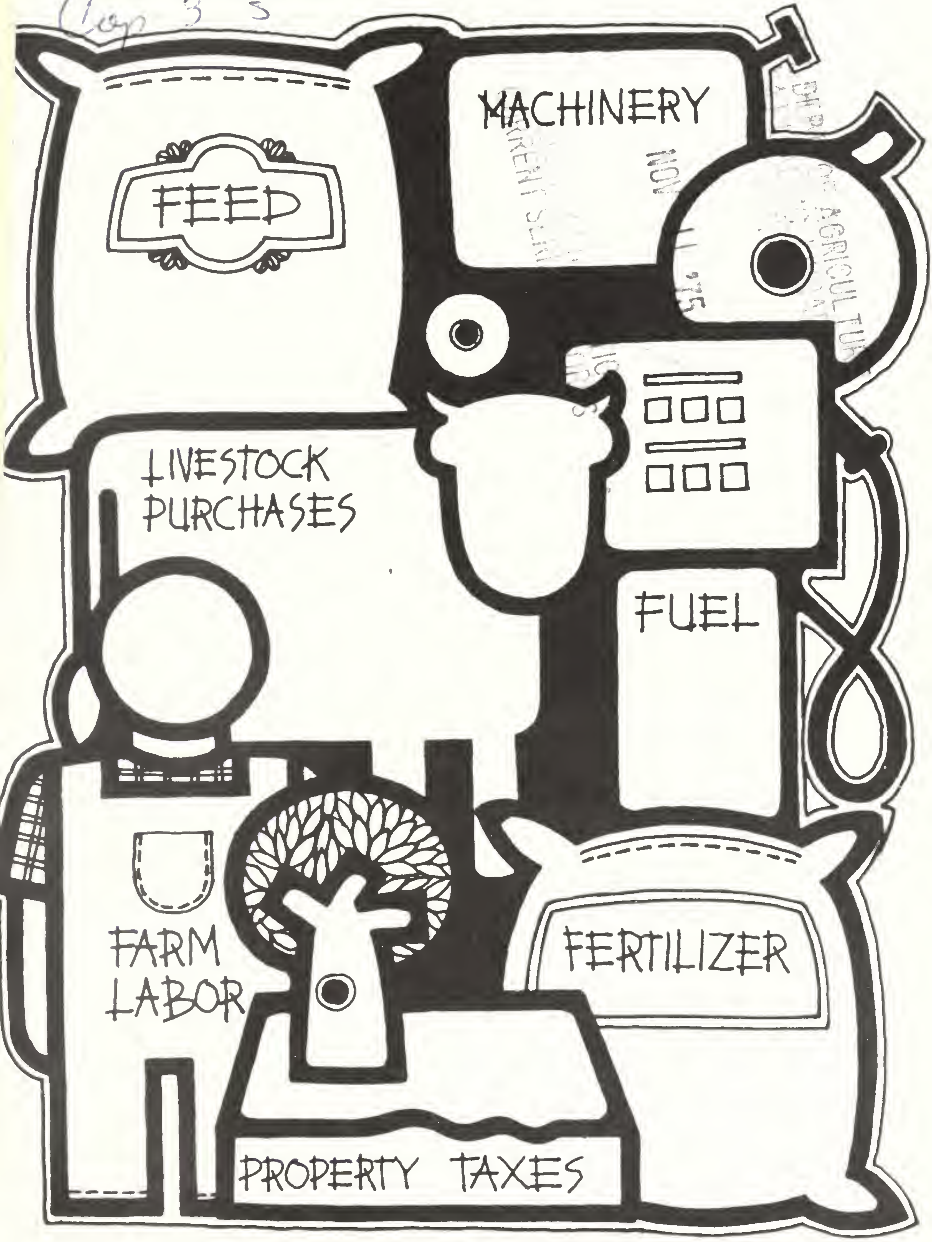
U.S. DEPARTMENT OF AGRICULTURE • STATISTICAL REPORTING SERVICE



PAYING TO PRODUCE

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In just 1 year, farmers upped their spending on production items by more than $20 billion. The year, of course, was 1973 and not exactly a "normal" year for U.S. producers, who realized their biggest net income on record.

It was probably inevitable that production expenses would reflect the higher earnings. Some producers no doubt took the opportunity to buy new equipment or make some needed repairs around the farm.

Others, of course, were thinking ahead to April 15 . . . some major purchases would help "level out" their earnings and hold their tax bill in line.

Whatever the reasons, SRS's survey of farm production expenditures revealed that the Nation's crop and livestock producers spent close to $74 billion—versus nearly $54 billion in 1972. That worked out to around $26,000 per farm, or some $7,000 over what the average producer doled out the year before.

Traditionally, livestock and poultry production grab the biggest share of farm outlays, and 1973 brought no surprises. Producers put out more than $11 billion—nearly $4,000 per farm—just to buy feeder animals, breeder stock, and broiler and laying chicks. Close to another billion dollars went for veterinarian services, pesticides and disinfectants, breeding and pasturing fees, and other services.

Feed purchases showed the heftiest dollar increase of any production expense, shooting from just under $8 billion in 1972 to a little over $12 billion a year later. Feed prices in 1973 averaged about 50 percent higher than in 1972, pushing feed expenditures per farm from around $2,700 to nearly $4,300.

Livestock equipment claimed an additional $681 million, bringing total livestock outlays—including marketing costs—to $25½ billion, a gain of almost $8 billion from 1972.

On the crops side, expenses escalated more slowly. Farmers spent just over $8 billion in 1973 for

seed, plants, fertilizer, lime, pesticides, containers, and marketing—versus nearly $6 billion a year earlier.

Seeds and plants cost the average producer $678, while fertilizer, lime, and pesticides ran up a national bill of $5 billion, or about $1,800 per farm. Fertilizer purchases grew nearly $500 per farm from 1972 to 1973, as fertilizer prices climbed about 10 percent.

Here's what SRS found about several other key expenditures not included in the totals for crop and livestock production . . .

Hired farm labor. Producers paid $5.1 billion in wages to hired workers in 1973, as average labor expenses rose roughly $200 to an average of $1,800 per farm.

Motor vehicles. Tractors, trucks, and cars used for farming added more than $4½ billion to total outlays. Insurance, registration, and license fees came to $157 per farm, up $12 from 1972.

Farm machinery. The average operator spent $1,257 for farm equipment in 1973, pushing the national total to $3.6 billion.

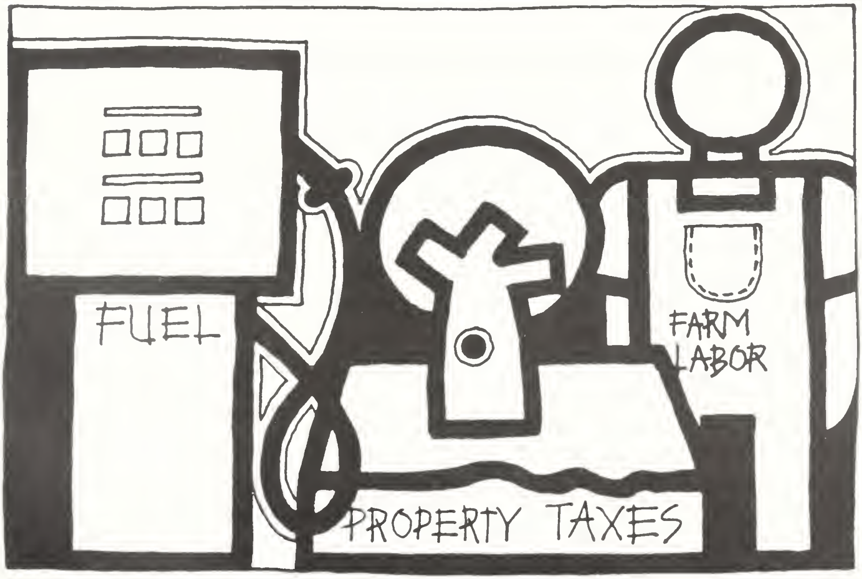
Petroleum products. Gasoline, LP gas, diesel fuel, kerosene, and related products for farm use ran the Nation's farmers about $2.8 billion. Gasoline posted the biggest dollar increase from 1972, as purchases climbed from $427 to $580 per farm. Sharply higher fuel prices in 1973 contributed much of the increase in petroleum expenditures.

Machine hire and custom work. These services averaged out to $429 a farm, or $1.2 billion nationwide, up more than a third from 1972.

Insurance, property taxes, and interest. Interest accounted for over half of these fees, which totaled more than $7 billion, or $2,500 per farm.

Individual producers also dug into their pockets for an additional $579 to cover various business expenses, as the average farm utility bill shot from $234 in 1972 to $342.

SRS began gathering these and a



host of other details on farm production expenditures on an annual basis in 1973. In early March each year, enumerators begin conducting personal interviews with a selected sample of crop and livestock producers to determine expenditures for the previous year. The last surveys included interviews with more than 2,000 farm operators.

Farm expenses are recorded only for the year in which they're incurred. A tractor bought in 1972, for example, wouldn't count in the 1973 survey, though the producer may still be paying for it.

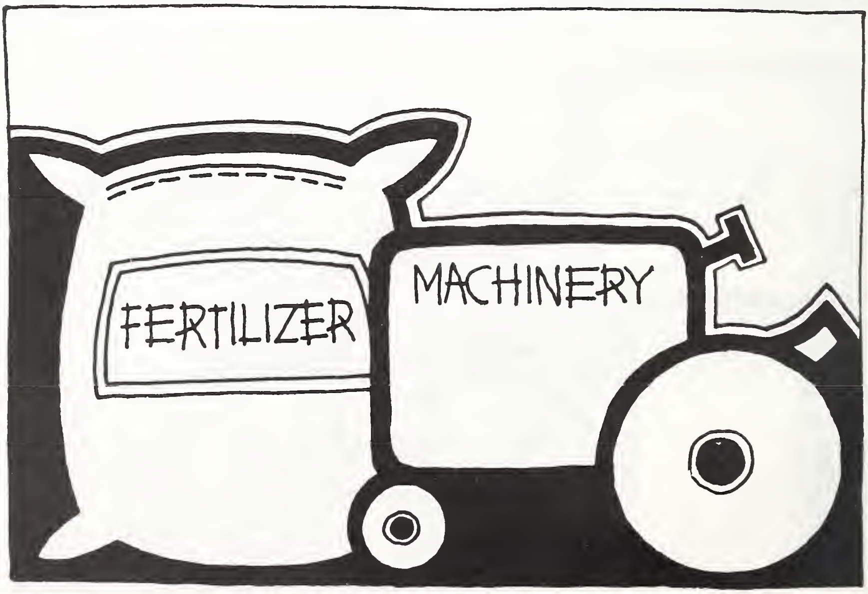
Also, the cost of constructing or adding on to farm buildings doesn't figure into a survey until the year the project's completed. Then, finance and interest charges, delivery and installation fees, and sales taxes are included in the total cost.

Survey results are also "fine-tuned" in several other ways to reflect as nearly as possible only those expenditures related to farm production. For example, the mileage put on cars and trucks for family transportation and nonfarm business is subtracted from total mileage to determine the share of expenses tied to farm use only.

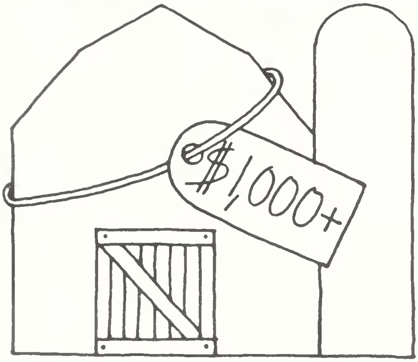
Main reason for SRS's annual farm expenditure survey is to update and maintain current weights for the Parity Index. Farm production expenditures are a major component of this Index, which shows whether or not the prices farmers receive for their products keep pace with the prices they pay for other commodities.

Besides telling farmers where they stand, the Parity Index has proven a vital tool for legislators, farm analysts, and others involved in shaping farm policy.

USDA's Economic Research Service also relies on survey results to develop its series of net farm income estimates. And survey findings provide data on many farm expenditures that simply aren't available from other sources.



NEW DEFINITION REFLECTS TODAY'S FARMING



Beginning in the late 1950's, your place was a "farm" if you 1) farmed less than 10 acres but sold at least $250 in farm products each year, or 2) farmed over 10 acres and sold $500 or more. But USDA and the Bureau of the Census are changing all that.

They now define a farm as "any establishment from which $1,000 or more of agricultural products is sold or would normally be sold during a year."

This means, of course, that there will be fewer "official" farms. USDA emphasizes, however, that small producers no longer included in the farm definition will still be eligible for Federal programs. Also, SRS's crop and livestock estimating program will continue to measure *total* agricultural output.

How much the new definition reduces farm numbers will be known following review of the 1974 Census of Agriculture, which will report information according to both the old and new definitions.

Using the old definition, SRS estimated there were 2.8 million farms at the start of 1975. The new definition is expected to trim current farm numbers 16-20 percent.

Biggest drawdowns are seen in New England, Appalachia and the Southeast, while the Mountain, North Central, and Great Plains States will experience the smallest declines.

The U.S. farm population, meantime, will shrink about 20 percent, but total cash receipts from farming will drop no more than ½ of 1 percent. This slight change in gross returns, coupled with the 16-20 percent drop in farm numbers, will drive income *per farm* sharply higher.

Three major classes of farms will be specified in conjunction with the new definition. A *primary farm* is one operated by a person who spends at least half his worktime on the farm, or by a corporation or multi-establishment company that earns more than half its gross business income from farming.

Part-time farms include those with operators who spend less than half their worktime there. *Business-associated farms*—the third major class—are run by corporations or large businesses engaged primarily in nonfarm activities.

"Abnormal farms," a fourth class, continue as the catchall for those farms run by institutions like hospitals and schools or used as experimental or research farms.

More sales categories for large farms will also be identified. Those selling more than $100,000—previously classed as one group—are now broken into groups for $100,000-$199,999, $200,000-$499,999, and $500,000 and over.

Types of farms will be expanded too. Farms once classed as "cash-grain," for example, will be broken into wheat, rice, corn, soybeans, and other cash grain farms. Livestock operations will undergo similar changes.

The new farm definition aims at better describing today's farming in light of the rapid changes it's undergone, including the concentration of production on large units, specialization, and the mounting involvement of nonfarm firms.

FROM FIELD TO FINAL REPORT

Vastness and variety describe America's agriculture . . . over 330 million planted crop acres, 130 million cattle and 48 million hogs, 3.4 billion broilers, 11 million dairy cows, more than 3 million acres of fruit and nut trees, and 482 million acres of pastures and ranges.

Weather, economic conditions, domestic and foreign demand, labor supplies, farm product selling prices, costs of raising crops and livestock, and a myriad of other factors influence production, supplies, and marketings. Current and reliable indications of crop output, the number of livestock and poultry being readied for market, stocks of grain, and many additional elements of agriculture help stabilize the atmosphere surrounding today's volatile farming industry.

The Crop Reporting Board and its field offices serving all States prepare and publish a full schedule of estimates detailing current and developing situations across all of agriculture.

Estimates are based on mail questionnaire surveys with thousands of producers, on personal interviews with other farmers, and even on in-the-field counts and measurements of the major commodities. All this information has a major role in forming agricultural estimates.

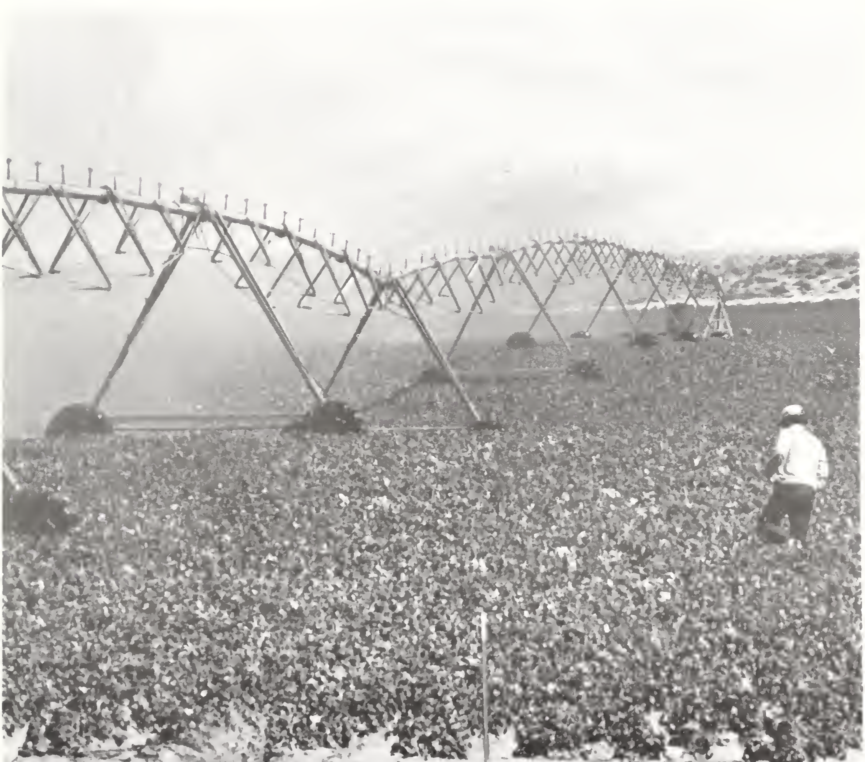
The Crop Reporting Board's program is constant—survey, evaluate, and report to the public.

Left. Enumerator and farmer meet to identify fields for special surveys. Crop and livestock counts from these and other sample fields will be used to develop production estimates.

Top left. Selected ears of immature corn in sample plots are measured to indicate potential yield.

Top right. A 3-foot frame is slipped into a soybean row where plants, nodes, and pods will be counted to help forecast output. Cotton, wheat, and other crops get similar evaluations.

Lower right. Counts and measurements must be done at certain times to get current data. Here an enumerator is identifying a sample potato field.



Left. Final State and national estimates are readied by the Crop Reporting Board. Locked doors, sealed windows, and disconnected phones prevent premature access to information which could upset commodity trading.

Below. Crop and livestock estimates are well covered by press and broadcasters. USDA officials meet with reporters to outline the effects of the estimates on foreign trade and farm and retail prices.

MULCH IT!

Hail can be a farmer's worst enemy. A recent 5-year study indicated that hail claims 2¼ percent of the value of 20 basic crops, costing farmers $685 million a year.

Land lying fallow can be just as vulnerable, but instead of crop losses, producers must contend with soil loss. Fallow land *can* be protected, say agricultural engineers with USDA's Agricultural Research Service. They've found that in the Great Plains, keeping at least a 50-percent mulch over fallow land can substantially reduce soil erosion caused by hail.

This protection is especially needed in the main hail belt stretching from northern Texas to western North Dakota, where nearly half the cropland is fallowed every year.

According to researchers, hail hitting fallow land at low energy—about 3.6 foot-pounds per square foot—can increase the amount of soil breaking away from clods by 50 percent. (A foot-pound equals the amount of energy used in raising a 1-pound weight 1 foot.)

This 3.6 foot-pound level is common in a high percentage of Great Plains hailstorms. Soil loss can double when hail energy climbs to 36 foot-pounds per square foot.

Experiments in a rain tower-wind tunnel facility also showed that soil loss accelerates when hailstones grow more than a fourth of an inch in diameter. Wind speed further influences soil erosion.

Using tapioca to simulate small hailstones, and marbles for hail measuring a third to two-thirds of an inch, researchers assessed soil losses on fallow land with no mulch and on land with a 50- to 90-percent cover of wheat straw.

Each test simulated a typical Great Plains thunderstorm—10 minutes of rain and hail and an additional 20 minutes of rain.

CROPS CORNERED '74 MARKET

Crops seem to be the ticket to more income for today's farmer. For the first time in 50 years, Americans in 1974 paid more for crops the farmer grew and sold than for the livestock products he marketed. And last year's farm receipts testify to this turnaround.

Looking at the total picture, cash receipts from farm marketings reached a record of $93.5 billion in 1974—$6.6 billion more than in 1973. Crop receipts alone turned up $11 billion above a year earlier. Posting the biggest gains were receipts from soybeans, wheat, sugar, vegetables, and tobacco. Prices, of course, set the pace, averaging 30 percent higher than in 1973.

During the 60's, crops accounted for about 42 percent of total marketing receipts. But at just over $52 billion, last year's crop receipts overran those from livestock products—by about $10 billion.

Meantime, livestock and product receipts dropped nearly $4½ billion. Well above average 1973 prices meant fewer dollars for cattle, calves, hogs, broilers, and turkeys. Things weren't so bleak for the milk producer, though—he grossed over $1 billion more than in 1973.

Farmers also got less from the Government last year, as direct payments to producers totaled only $½ billion, versus more than $2½ billion in 1973 and $4 billion in 1972.

Realized gross farm income climbed nearly $6 billion in 1974 to a record $101 billion. Though that looked good on paper, bigger production costs, up around $7½ billion to about $73 billion, slashed net earnings to just under $28 billion. That's lower than 1973's record realized net income of $29½ billion, but still substantially above any previous year.

SURVEYSCOPE

To give our readers a clearer picture of the vast scope of SRS activities, Agricultural Situation presents a series of articles on special surveys undertaken in various States. While these are not national surveys, they are important to the agriculture in individual States.

Our "Big Sky State" is also a big grain State. Montana now ranks fifth nationally in wheat production, third in barley output, and second only to North Dakota in the amount of these grains stored on farms. Last year's wheat and barley crops meant more than $644 million in cash receipts for Montana producers.

Because of the vast quantities of grain produced and stored on Montana farms, the State's Wheat Commission recently funded the collection of additional grain storage statistics.

"These data are gathered and released by the Montana Crop and Livestock Reporting Service," says Dan Herbert, Statistician in Charge, "and are *not* available under the regular Federal statistical program."

According to Herbert, the expanded data provide Montana producers, the Montana Wheat Commission, and other marketing agencies better information upon which to base promotion and marketing decisions.

Included in the new data is a breakdown of farm and commercial wheat stocks by major class (winter wheat, spring wheat, and durum), not available through the regular Federal program. Production estimates by class of

Montana's grain storage surveys provide a detailed breakdown of State grain holdings . . .

wheat have long been available, but these don't necessarily mean that subsequent quarterly stocks would fall in the same proportion.

For example, on January 1, 1975, winter wheat stocks stood at about 43 million bushels and accounted for 54 percent of production. A year earlier, stocks totaling 28 million bushels made up 50 percent of output.

Spring wheat stocks, meantime, came to 28 million bushels last January, totaling 67 percent of production versus the 34 million bushels a year earlier that made up 80 percent of the harvest.

For the spring wheat producer, it meant that supplies as a share of production were smaller than in 1974. But winter wheat growers found more of their crop still around than at the same time a year earlier.

Beginning in October 1974, data were also expanded to show how much of the stored crop was sold or forward contracted, and how much was still available for sale.

"This information is important to producers and organizations such as the Montana Wheat Commission," claims Herbert, "especially in times of tight supplies. The existence of accurate data on proportions 'sold' and 'free' could be instrumental in tempering controls or reductions in exports when supplies start to shrink."

Last July 1, Montana producers reported 9 percent of the farm stocks of wheat and 2 percent of barley stored on farms had been sold or contracted. Throughout the 1974 marketing year, most farm-stored grain in the State was under producer control.

Knowledge of the inventory of uncommitted grain puts producers in a strong marketing position.

Most Montana producers have storage facilities, store much of their grain, and watch the wheat and barley markets before selling. For producers to make the right move at the right time depends on good information about supplies, prices, and crop disappearance.

. . . which helps wheat and barley growers to sell their crops at the best possible time.

Briefings

RECENT REPORTS BY USDA OF ECONOMIC, MARKETING, AND RESEARCH DEVELOPMENTS AFFECTING FARMERS.

EXPORT EXPECTATIONS . . . Late summer grain sales to the USSR and a firming of prices for most commodity exports are now expected to push the value of U.S. farm goods sold abroad in fiscal 1976 to near the $22 billion mark. In fiscal 1975, the Nation's agricultural exports climbed to a record $21.6 billion. USDA economists say that besides big sales gains to the Soviets, farm shipments to South Asia, Southeast and East Asia, Japan, Canada, and North Africa should also pick up during the current fiscal year.

ON THE IMPORT SIDE . . . Economists are looking for about $9.3 billion in foreign farm goods to cross our shores in fiscal 1976, bringing agriculture's contribution to the U.S. trade balance to around $12½ billion, a step ahead of the previous record in fiscal 1975.

NOT SO SWEET . . . Sharply increased prices for sugar and sugar-containing products were enough to make the average American dip into the sugar bowl a little less last year—and this year too. Sugar use in 1975 may slip below 90 pounds a person, down from 97 pounds in 1974 and a recent high of 103 pounds in 1972. Not since the sugar-short years during and right after World War II has U.S. sugar consumption fallen below 90 pounds a person.

BOGS ABUNDANT . . . SRS's Crop Reporting Board forecasts 1975 cranberry production at 2.3 million barrels, up 1% from last year, and a 7% hike from 1973. Smaller crops expected in New Jersey and Wisconsin should be more than offset by bigger harvests in Massachusetts, Oregon, and Washington. Output in Massachusetts is seen at 950,000 barrels, a 2% gain from last year, while Washington's crop, pegged at 126,000 barrels, should beat its 1974 tally by 37%.

COFFEE COMEDOWN . . . Killing frosts in Brazil last July failed to reduce the current coffee crop, but are expected to slash 1976-77 pro-

duction by more than 50%. Harvest of the 1976-77 Brazilian coffee crop will get underway around May 1976 and is now forecast at 8 to 11 million 132-lb. bags, off sharply from the 23 million bags harvested in 1975-76. Effects of the freeze will linger into 1977-78 as well, since large numbers of trees will need substantial pruning or replacement, and over a year to recuperate.

MORTGAGE NOTES . . . You may get better terms on a home mortgage if you live in the city than in the country, according to a recent USDA study. While credit terms in rural areas have been improving, say researchers, an examination of existing mortgages on one-unit, homeowner properties revealed that median interest rates ran about 10% higher in nonmetro areas than in metro areas. Also, average length of the mortgage ranged about 5 years less in rural America.

DOLLARS FOR DEVELOPMENT . . . During fiscal 1975, USDA's Farmers Home Administration (FmHA) made nearly $5.5 billion available for rural development. In its most extensive program ever, FmHA authorized more than 215,000 repayable loans totaling $5.3 billion for farmer programs, rural housing, community facilities, and business and industry. Over $181 million was disbursed in housing and community facility programs.

PUTTING ASIDE SET-ASIDE . . . Agriculture officials have announced there will be no set-aside programs for wheat, feed grains, and upland cotton for the 1976 crop year. This will mark the third straight year for feed grains and wheat, and the fourth for cotton in which no set-aside is required. Despite record corn and wheat crops anticipated this year, producers will not be encouraged to pull cropland out of production because export demand continues strong.

BUGGED BY INSECTICIDES? . . . A new publication prepared by USDA's Agricultural Research Service and tailored especially to the home gardener tells how to control insects on deciduous fruits and tree nuts without applying large and costly doses of chemical insecticides. The bulletin, which contains separate sections on each major fruit as well as chestnuts, pecans, and walnuts, also contains numerous color photographs and illustrations of the insects and their damage to help gardeners pinpoint which insect is giving them problems. For a copy of *Control of Insects on Deciduous Fruits and Tree Nuts in the Home Orchard— Without Insecticides,* write the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price is 90¢.

A SAFER CIGARETTE? . . . Under 11 separate research awards granted by USDA's Agricultural Research Service, scientists in New York and Kentucky have embarked on an effort to make cigarette tobacco less hazardous to humans. The research projects have been prompted by a somewhat alarming rise in cigarette smoking in this country. Last year American adults smoked 208 packs of cigarettes a person, the highest level since 1968, when per capita use climbed to 209 packs. Cigarette smoking in 1975 is expected to continue at year-earlier levels.

INTRODUCING CRAMBE . . . Purdue University scientists cooperating with USDA will evaluate 50 new crambe introductions for possible growth in this country. Crambe, a bushy member of the mustard family, is one of several plants being studied as a possible replacement for sperm oil, imports of which were banned in 1971 when the U.S. placed sperm whales on the endangered species list. The plant shows particular potential as an oilseed source for plastics and lubricants. Found growing wild in several Mediterranean countries, the crambe plants will be studied for their growth habits, yield, oil content, meal quality, and other important characteristics as a field crop.

ANOTHER MILESTONE . . . When nine 38,000-bushel-capacity steel quonset-type buildings went to the highest bidders in Virginia last August, the Government had sold its last structure for storing farm surpluses. It marked the end of an era spanning 35 years in which surplus wheat, corn, cotton, peanuts, and other commodities bought from farmers under price support programs were stored in Government-owned structures. In 1959, storage capacity held by USDA stood at 990 million bushels. Disposal of the facilities began in the mid-1960's and was largely completed by October 1974, as farmers bought many of the structures for use on their own farms.

A GOOD CUSTOMER . . . More people with bigger incomes in Iran are eating a lot more U.S. meat these days. In only a month and a half at the start of this year, Iran received around 640 U.S.-bred dairy heifers, quite a jump from just over 800 head delivered in all of calendar 1974. It was expected, too, that as Iran's new alfalfa crop matured, the U.S. would be sending even more cattle—from two to three planeloads a week.

TOBACCO TRADE . . . Exports of U.S. unmanufactured tobacco set their third straight post-World War II record last year, climbing to just over 651 million pounds. The heavy export volume reflects tight supply conditions in many of the traditional tobacco-exporting countries in 1974 and a growing preference for American blend-type cigarettes that has increased world demand for high quality U.S. leaf tobacco.

Statistical Barometer

Item	1973	1974	1975—latest available data	
Farm Food Basket:[1]				
Retail cost (1967=100)	142	162	179	July
Farm value (1967=100)	167	178	199	July
Farmer's share of retail cost (percent)	46	43	43	July
Farm Income:				
Volume of farm marketings (1967=100)	112	111	91	[2]
Cash receipts from farm marketings ($bil.)	86.9	93.5	88.0	[2]
Realized gross farm income ($bil.)	95.3	101.1	96.1	[2]
Production expenses ($bil.)	65.8	73.4	75.6	[2]
Realized net farm income ($bil.)	29.5	27.7	20.5	[2]
Income and Spending:				
Disposable personal income ($bil.)	903.7	979.7	1,078.8	[2]
Expenditures for food ($bil.)	143.6	164.5	178.7	[2]
Share of income spent for food (percent)	15.9	16.8	16.6	[2]
Agricultural Trade:				
Agricultural exports ($bil.)	17.7	22.0	1.4	June
Agricultural imports ($bil.)	8.4	10.2	.8	June
Farm Production and Efficiency:				
Farm output, total (1967=100)	112	106	114	[3]
Livestock (1967=100)[4]	105	106	106	[3]
Meat animals (1967=100)	108	110	111	[3]
Dairy products (1967=100)	98	98	98	[3]
Poultry and eggs (1967=100)	106	106	101	[3]
Crops (1967=100)[5]	120	110	122	[3]
Feed grains (1967=100)	115	92	116	[3]
Hay and forage (1967=100)	109	104	105	[3]
Food grains (1967=100)	113	120	141	[3]
Sugar crops (1967=100)	112	107	127	[3]
Cotton (1967=100)	175	157	127	[3]
Tobacco (1967=100)	88	100	113	[3]
Oil crops (1967=100)	155	129	146	[3]
Cropland used for crops (1967=100)	104	106	107	[3]
Crop production per acre (1967=100)	115	104	114	[3]

[1]Average annual quantities per family and single person households bought by wage and clerical workers, 1960-61, based on Bureau of Labor Statistics figures.

[2]Annual rate, seasonally adjusted, second quarter.

[3]Preliminary.

[4]Includes minor livestock products not shown in the separate groups below. Cannot be added to gross crop production to compute farm output.

[5]Includes miscellaneous crops not shown in the separate groups below. Cannot be added to gross livestock production to compute farm output.

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DIANE DECKER, EDITOR

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